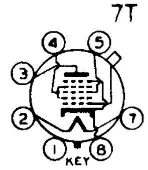
6L7, 6L7-G

PENTAGRID MIXER AMPLIFIER

Heater ■	Coated Unipotential Cathode		
Voltage	6.3		a-c or d-c volts
Current	0.3		amp.

	6L7	6L7-G	
Direct Interelectrode Cap.	▲	▲▲	
Grid #1 to Grid #3	0.2 max.	0.2 max.	μμf
Grid #1 to Plate	0.001 max.	0.005 max.	μμf
Grid #3 to Plate	0.1	0.24	μμf
Grid #1 to All Other Electrodes	7.5	6	μμf
Grid #3 to All Other Electrodes	10	12	μμf
Plate to All Other Electrodes	11	10	μμf
Overall Length	3-1/8" max.	4-7/32" to 4-15/32"	
Maximum Diameter	1-5/16"	1-9/16"	
Bulb	Metal Shell, MT-8	ST-12	
Cap	Miniature	Skirted Min.	
Base	Small Wafer Octal 7-Pin	Small Shell Octal 7-Pin	
Basing Designation	7T	G-7T	

Pin 1 {6L7, Shell; 6L7-G, No Con.
Pin 2 - Heater
Pin 3 - Plate
Pin 4 - Grids #2 & #4



BOTTOM VIEW

Pin 5 - Grid #3
Pin 7 - Heater
Pin 8 - Cathode & Grid #5
Cap - Grid #1

Mounting Position — Any

AMPLIFIER - Class A_1

Plate Voltage	300 max.	volts
Screen Voltage (Grids #2 & #5)	100 max.	volts
Plate Dissipation	1.5 max.	watts
Screen Dissipation	1.0 max.	watt
Typical Operation:		
Plate	250	volts
Screen	100	volts
Control Grid (Grid #1)	-3	volts
Control Grid (Grid #3)	-3	volts
Plate Res. (approx.)	0.6	megohm
Transcond., Grid #1 to Plate	1100	μmhos
Transcond., Grid #1 to Plate*	5 approx.	μmhos
Plate Cur.	5.3	ma.
Screen Cur.	6.5	ma.

MIXER

Plate Voltage	300 max.	volts
Screen Voltage (Grids #2 & #4)	150 max.	volts
Plate Dissipation	1.0 max.	watt
Screen Dissipation	1.5 max.	watts

■ In circuits where the cathode is not connected directly to the heater, the potential difference between heater and cathode should be kept as low as possible.
▲ With shell connected to cathode.
▲▲ With close-fitting shield connected to cathode.
* With grid #1 bias of -15 volts, and grid #3 bias of -15 volts.

RCA RADIOTRON DIVISION
RCA MANUFACTURING COMPANY, INC.

6L7,6L7-G

PENTAGRID MIXER AMPLIFIER

(continued from preceding page)

Typical Operation:

Plate	250	250#	volts
Screen	100	150#	volts
Signal-Grid (Grid #1)	-3 min.	-6# min.	volts
Oscillator Grid (Grid #3) **	-10	-15	volts
Peak Osc.-Grid Voltage Applied to Grid #3	12 min.	18 min.	volts
Plate Res.	Greater than 1		megohm
Conversion Transcond.	375	350	μmhos
Conversion Transcond.	5●	5△	μmhos
Plate Cur.	2.4	3.3	ma.
Screen Cur.	7.1	9.2	ma.

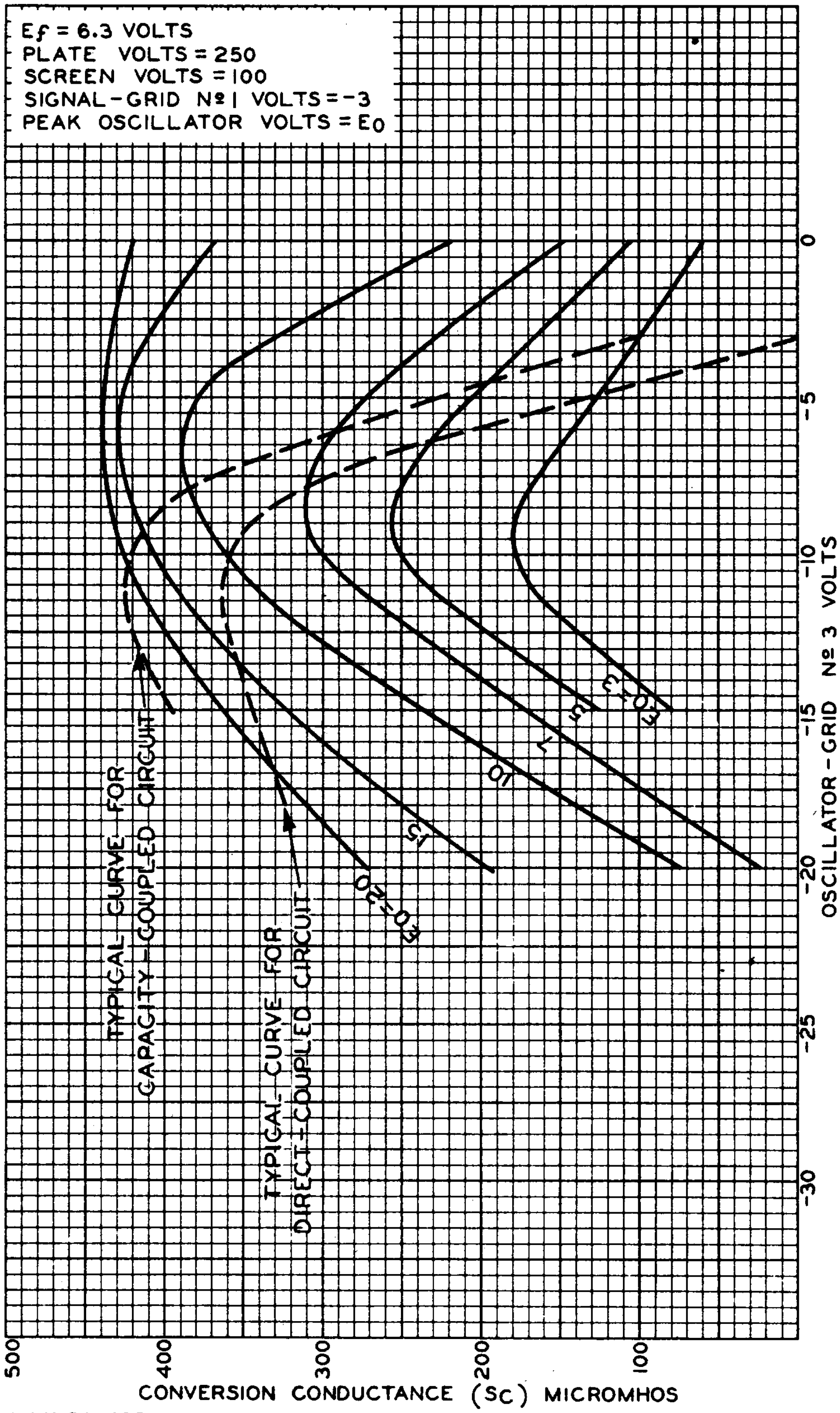
** The d-c resistance in grid #3 circuit should not exceed 50000 ohms.
● With grid #1 bias of -30 volts. △ With grid #1 bias of -45 volts.
These conditions are recommended for multi-range receiver applications.

6L7

Cunningham Radiotron

RCA-6L7

OPERATION CHARACTERISTICS



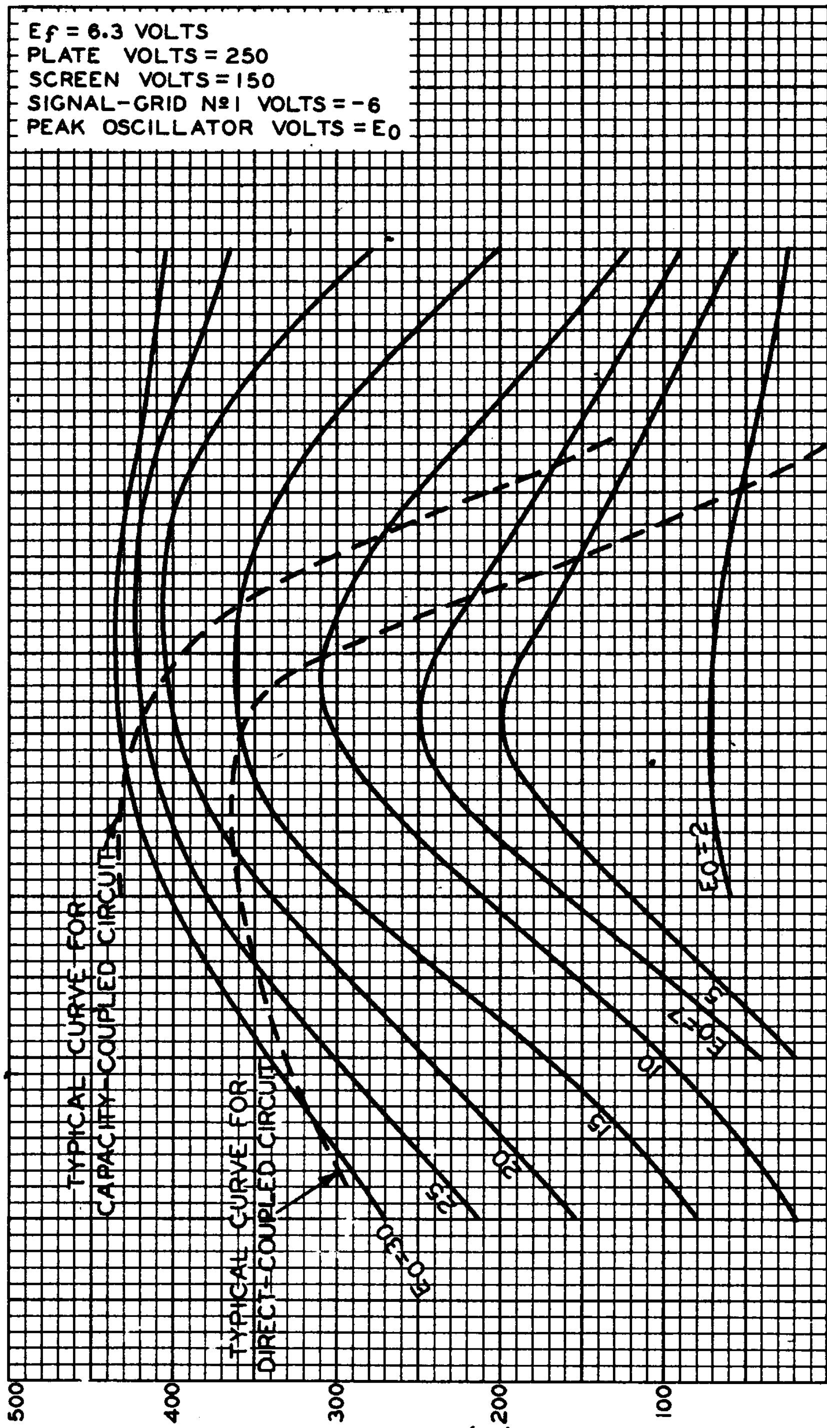
JULY 30, 1935 — RCA RADIOTRON DIVISION, RCA MANUFACTURING COMPANY, INC. — 92C-4447

6L7

Cunningham Radiotron

RCA-6L7

OPERATION CHARACTERISTICS

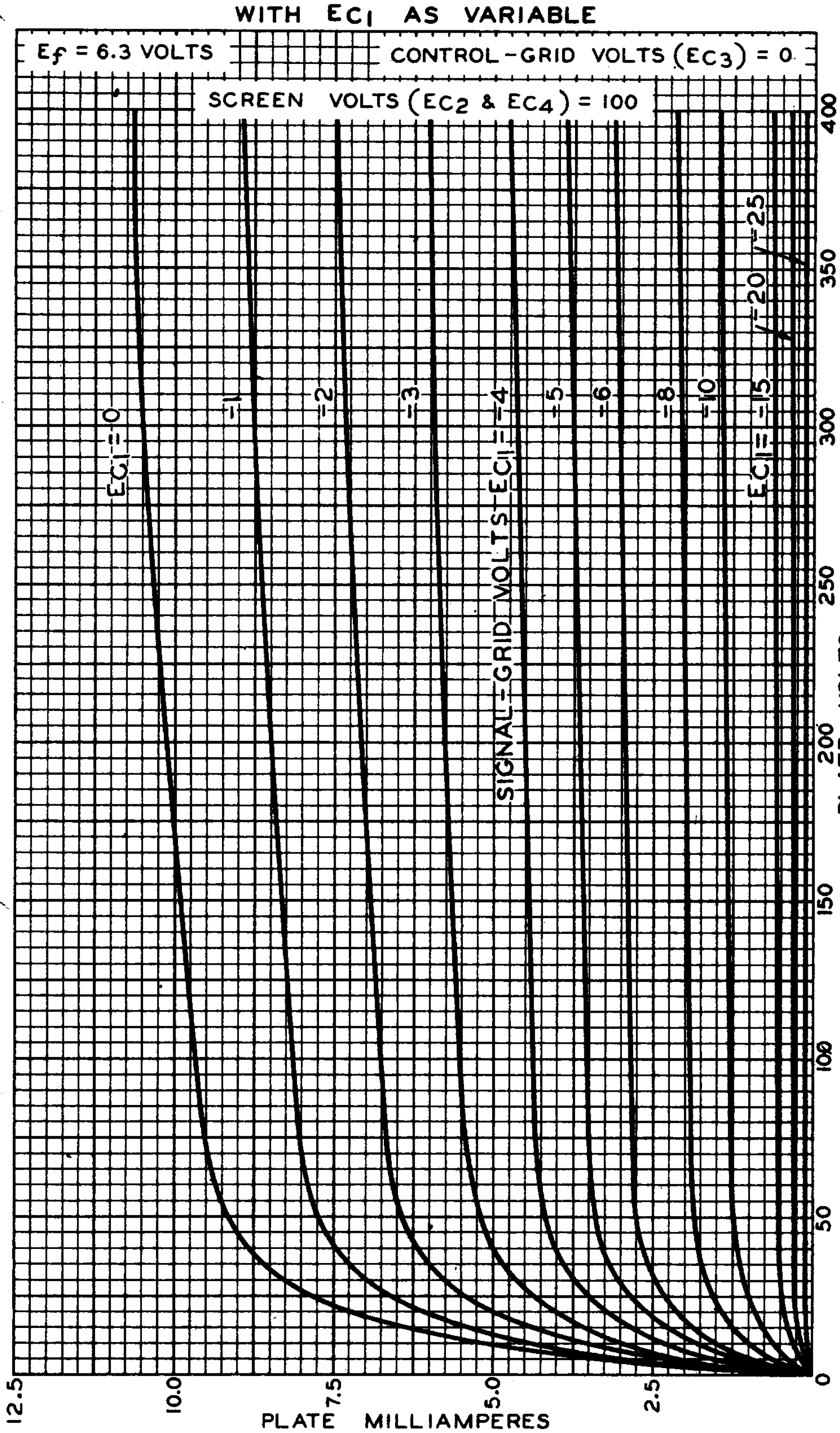


JULY 26, 1935 RCA RADIOTRON DIVISION RCA MANUFACTURING COMPANY, INC. 92C-4445

RCA

6L7

AVERAGE PLATE CHARACTERISTICS
WITH E_{C1} AS VARIABLE



JAN. 3, 1936

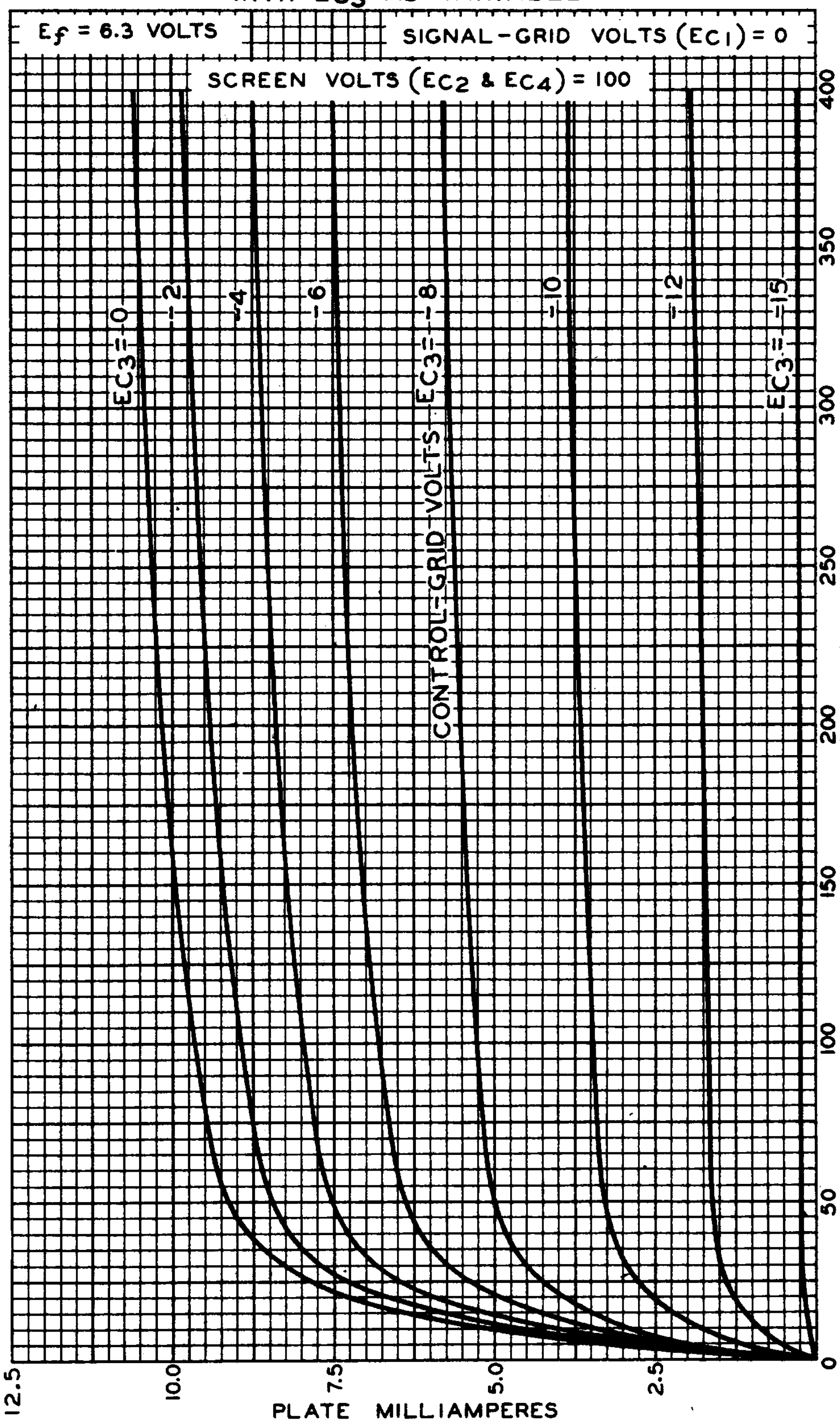
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92C-4531

6L7

6L7

AVERAGE PLATE CHARACTERISTICS
WITH E_{C3} AS VARIABLE



JAN. 7, 1936

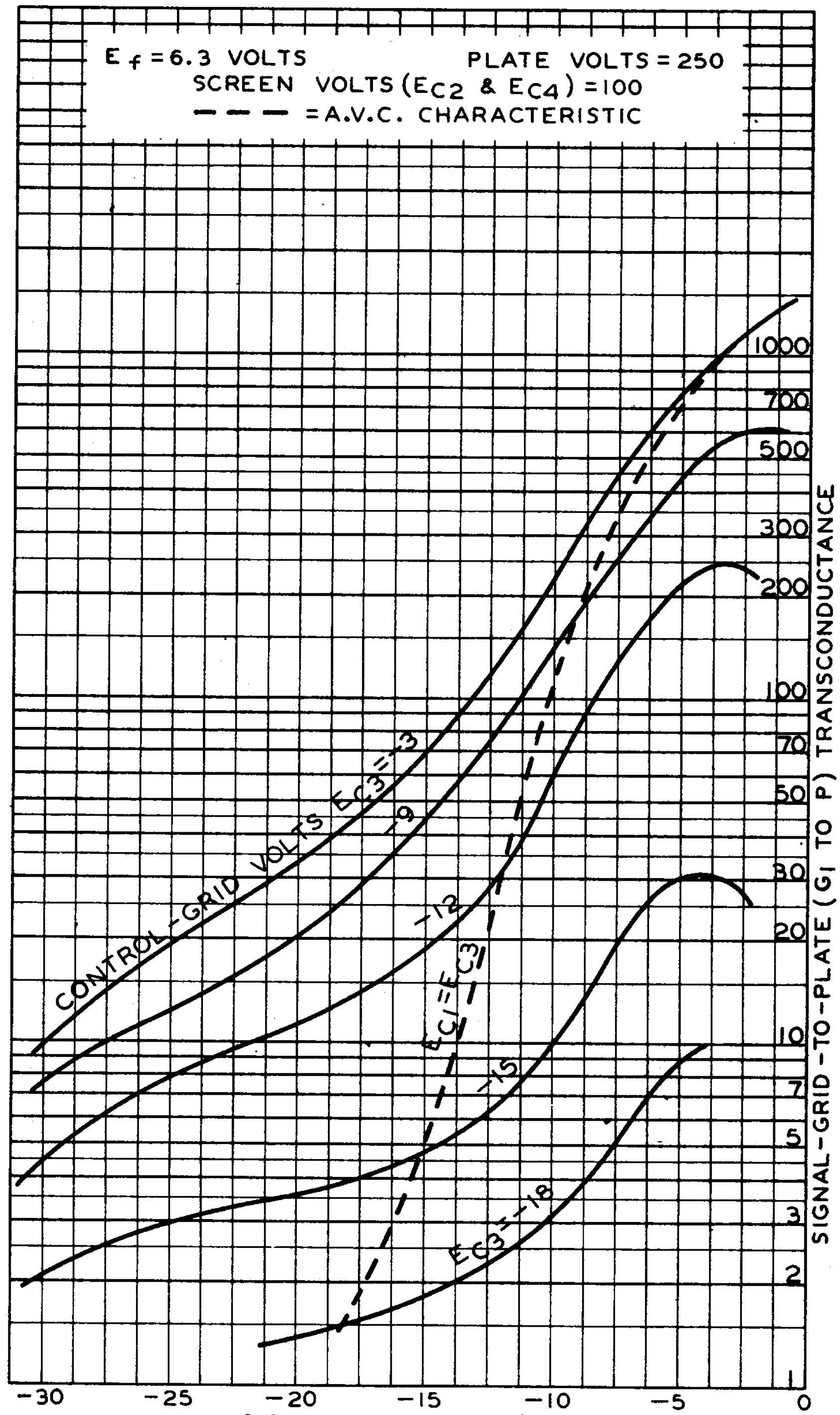
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92C-4534

6L7

6L7

AVERAGE CHARACTERISTICS



JAN. 8, 1936

RCA RADIOTRON DIVISION
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92C-4536

6L7

6L7

AVERAGE CHARACTERISTICS

